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ABSTRACT OF THE DISCLOSURE

A region-of-interest (ROI) video-coding method and apparatus based on fuzzy logic control for a video encoder is provided. Providing an image having a plurality of region-of-interest regions and a plurality of non-region-of-interest regions, the first step is to separate the region-of-interest regions and the non-region-of-interest regions from the image. Then by sending an input from the region-of-interest regions to a fuzzy logic control, in which the fuzzy logic control performs fuzzy manipulations that enhances the quality of the region-of-interest regions, and thereof the overall quality of an output image. The method and apparatus are particularly useful in videophone and videoconferencing.